

International Conference on University Teaching and Innovation, CIDUI 2014, 2-4 July 2014,
Tarragona, Spain

Learning through experience and teaching strategies outside the classroom at design university studies

Tània Costa*

EINA, University School of Design and Art attached to the Autonomous University of Barcelona, Passeig Sta. Eulàlia 25, Barcelona 08017, Spain

Abstract

Working outside the classroom, immersed in a professional and/or everyday setting, generates a tension which results in a kind of learning experience, which, for certain disciplines, is more complete and engaged than the “simulated” knowledge provided within an academic environment. Knowledge acquired through experience is deposited as part of the subject actor and therefore becomes part of an indelible remembrance in a person's memory.

© 2015 Published by Elsevier Ltd. This is an open access article under the CC BY-NC-ND license

(<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

Peer-review under responsibility of the Scientific Committee of CIDUI Congrés Internacional de Docència Universitària i Innovació.

Keywords: Outside classroom; Exercise; Learning by doing; Participatory teaching; Generative teaching; Systemic approach

1. Introduction

This is a research and reflection article on the teaching benefits of moving teaching actions to non-academic contexts, outside the classroom. Apart from taking into account the effect caused by interactions with professional and everyday world, it also focuses on the conception of a university class as a research area. University learning understood as a research activity leads to a learnt through experience knowledge, not only in practical classes but also in theory classes.

* Corresponding author.

E-mail address: tcosta@eina.cat

The hypothesis focuses on the practice of university teaching of design, even though it can be easily extrapolated to other disciplines. Following this approach, the unifying thread of the discourse is based on study cases experienced by the author herself and on observations deriving from her teaching practice. In addition, all this is decontextualised with examples from other teaching initiatives belonging to the same medium and show converging point of views.

This essay-study has been developed within the Research Group investigation program Design Processes. Advanced Practices in Art and Design, EINA, University School of Design and Art attached to the Autonomous University of Barcelona. Narrative discourse and the theoretic referents used are part of the Culture of design perspective that predominates in the Research Group.

Working outside the classroom, immersed in a professional and/or everyday setting, generates a tension which results in a kind of learning experience that may be more complete and engaged than the “simulated” knowledge provided within the academic environment. Knowledge acquired through experience is deposited as part of the identity of the subject actor and therefore becomes part of an indelible remembrance in a person's memory. Consequently, academic content is not seen as external information with which contact is made on certain occasions, but it is interiorised so that it becomes part of the student's personality as an individual experience.

In terms of the teaching that learning through experience requires, teachers must give the teaching side of their work a “generative” objective, where the main challenge is not conveying their knowledge but helping students generate their own. For example, facilitating procedures instead of determining formalisations. In this text, the “educational teaching / generative teaching” duality comes from the analogy made of research types. In effect, “generative research” can be distinguished from “educational research” because its objective is to generate knowledge for society instead of expanding that of the researcher (Sanders & Stappers, 2013).

2. Experience and systemic vision

In situations outside the protection of academia, teachers relinquish some of their responsibilities and transfer them to the students giving them autonomy and self-responsibility, as here the decision to defer a submission or accept bad work in exchange for a lower grade does not lie with them. Therefore, the decisions that are taken become more transcendent and engaged and the attitude of thoroughness in all phases of the project becomes an inescapable exercise.

On a Visual Arts Workshop that I run (until 2014) as part of the Design Degree at EINA, University School of Design and Art attached to the Autonomous University of Barcelona, we develop an exhibition project in all its stages, from content creation through to installation. When inaugurating the exhibition at an artistic centre, for example, the weight of reality is imposed on the project and there is no room for delay. To resolve last-minute problems, students need a critical eye, be able to react and show formal flexibility that would not require the “simulated” project being submitted to the class. The exhibition content creation process is also continuously being testing with/for “real” contexts by working in collaboration with agents outside academia. For example, during the 2013-2014 academic year, with the team from the Can Castells Sant Boi Arts Centre (culture technicians, exhibition room managers, audiovisual creator, maintenance manager), the “Street Artists” group of interns from the Benito Meni de Sant Boi mental health centre and their teacher, suppliers, visitors to the exhibition, the people in charge of budgets, etc.

Finally, students do not only work to fulfil the requirements set out in the subject programme, but with a view to how visitors to the exhibition will assess their work and the possibilities of curriculum continuity or acquisition via the project.

The exercise, therefore, is not an isolated unit, but is viewed from a systemic vision, in other words, as an integral part of an interdependent whole of actor agents and contextual circumstances where academic and professional methodologies merge. Immersion in this complex system is part of learning by doing, as not only do the students study how to do things, but they do them directly. In the book entitled, *Design Education. Learning, Teaching and Researching Through Design*, Philippa Lyon devotes a chapter to “Learning Through Doing”: “Although they are learning how to be fashion designers by being fashion designers” (2011:81).

3. The teacher as “facilitator” and participative teaching

This attitude of continuous learning, in light of unforeseen and spontaneous situations generated by the interaction with “non-controlled” complex environments, is similar to the experience of the teachers who take part in it. Not only the teacher, but other agents (like the ones mentioned above regarding the exhibition at Can Castells, Sant Boi), who also take part through contact with the students and who therefore act as an unscheduled extension to the teachers on the project.

In this sense, these exercises also represent a learning space where teachers can extend their teaching strategies, streamline their point of view and learn how to adapt to unexpected situations generated in situ through contact with these “non-controlled complex environments”. It identifies the teaching task as the role of “facilitator”, rather than as they are usually seen as teachers. It's not just a question of transmitting contents, but making them effective activating learning strategies that allow them to react in different and suitable ways in different situations and contexts. Content can be forgotten, however the learning mechanisms included in the subjectivity remain to be activated during each update when they come into contact with different realities. Students no longer work to fulfil the teacher's expectations and they now work to develop themselves.

At the Danish Kaospilot School – which teaches design by doing, business leadership and creative leadership – the teacher is known as the facilitator, which is more suitable for the participatory work undertaken in discussion groups, practices and attendance at other activities. This clearly shows continuous recycling being added to teaching methodologies and curricular content by teachers. It also requires group coordination and guidance skills and abilities that are not connected to their erudition and/or expertise regarding the subject in question.

This type of teaching could be defined as a participatory teaching method, as it matches those at the widest point of the Learning Pyramid drawn up by the National Training Laboratories in Maine. However, not taking it as a one-off model, but as another part of the argumentation, and taking into account other points of view about it, such as that of scientist Daniel Willingham, which defend the study of memorisation for specific uses and distrusts the interpretation of percentages that do not specify the variables that participate in it (Washington Post, 2013).

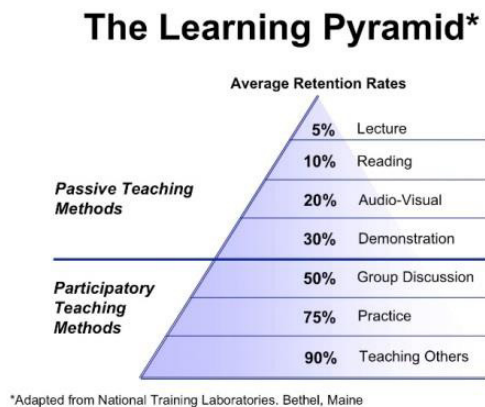


Fig 1. The learning Pyramid.

In the article “The student revolution has begun, simply put, it’s a boycott of academia!”, Kaospilot teacher Simon Kavanagh warns of the urgency and need for change in teaching to bring students closer to the real and the professional world and the world of collaborative and creative work practices. “Academic institutions are like Oil tankers, it takes a ridiculously long time to change direction or slow down. And as a result I fear, like history has always shown us, if you are reactive and not proactive, the outcomes and suggested alternatives will be poor and badly tested, resulting in a regression back to the ‘same as it ever was’” (Kaospilot, 2013) .

Service Learning projects are an extremely valid option given demands like the one above. For example, Rovira i Virgili University is spearheading the way in Catalonia in Service Learning methodology projects (APS) that consist of practical learning exercises applied to contexts with social problems that are outside academia. The APS adds a new objective to the university's challenges with the so-called “third function”, in other words, the social function, as well as the two classical functions of teaching and research. With the Service Learning projects, the University offers a service for social causes and, at the same time, students exercise their skills and abilities by solving real needs.

4. Exercising and Learning by doing

In *Muerte aparente del pensar* (2013), Peter Sloderdijk stresses the inefficiency of teaching strategies based on the teacher-based and one-way discourse of conventional academia: “Exercise by young people in discipular receptivity is accompanied by a paralysation that has serious consequences for mobility. It's here that something we might call a sedation starts which comes from sitting-at-the-teacher's-feet: it's here that we have sedentary humans in the school sense of the word (this second form of inactivity has nothing to do with the settlement of farmers in their fields).” However, he himself argues a possible alternative that could be pursued based on his idea “of exercise.”

Sloderdijk proposed the “living or exercising” lifestyle as an alternative to the contemplative or pure action. At a mid-point between the two, knowledge will be acquired from exercise, viewed as theoretical-practical skills development for achieving the requirements of exercise. Learning, therefore, would be set out as a series of preparatory exercises that are revealed in a continuous movement, in a process, with no absolute final, conclusive or concluding targets. Exercise would prepare the skills, instead of external objects or circumstances, thereby making itself a doing subject given the different unforeseen circumstances and situations.

This perspective comes from teaching practices based on learning from experience, usually known as “learning by doing”, as in the case of the Kaospilot School, or EINA's exhibition project at Can Castells which we have already mentioned. Other examples, in the design sector from where this text has been drafted, include study centres that call themselves “industrial post-design” (given their digital or design from experience focus), such as Hiperwerk in Basel, Switzerland, or Hyper Island, in Sweden. The latter in particular is often known as “the school with no teachers” because within the teaching innovation that they promote, autonomous learning in current professional contexts is a priority. No prior grades are required to access courses, instead students have to complete a series of creativity, group problem-solving tests, etc. and are selected by former students, the school's personnel and external professionals. Learning is trial-and-error-based, so no software is taught (students learn it for themselves), there are no “text” books or examinations. The school building is open 24 hours a day to allow students to work, exchange ideas, meet up, gives each other advice, etc. at any time.

Each project is developed by different groups working in parallel on different areas: design, project management, leadership, branding, marketing, programming, etc. During the process, they become more closely connected, some merge, others disappear (mistakes are seen as learning, and not a failure), etc. Parallel discussions are held about the common project and teachers' “lectures”.

Consequently, while students study, their work is linked to professional activities and practical placements in companies take place during the first year instead of at the end of the course (as is usually the case for design studies).

5. De-specialised emerging disciplines

The transformation of teaching methodologies, therefore, has to match the subject texts and the specificities of the knowledge area of which the courses form part. In the case of design studies, for example, Sanders and Stappers (2013:17) propose a table that distinguishes and compares traditional design disciplines (Old) with emerging design disciplines (New) within the education context.

- Old: visual communications design + industrial design + interior space design + architecture + interaction design.

- New: design for experience + design for service + design for innovation + design for transformation + design for sustainability.

This reclassification shows that at present design would not interpreted or practiced on the basis of these material aspects which determine the product and its production, but on attitudes, values, ideologies, methodologies and interactions. “Experience”, “service”, “innovation”, “transformation”, “sustainability” are dematerialised and unspecific concepts that can be applied to any human field or discipline. However, “visual communications”, “industrial”, “interior space” and “architecture” (not “interaction”) are concepts that tell us about the object itself and definite, delimited and specific environments.

This description could also apply to other fields of study, such as Fine Arts, Humanities, Culture Management, etc. Therefore, in similar fields, traditional disciplines are defined by a specialisation in the technique, the object, production and location, whereas emerging disciplines do so through de-specialisation that is concerned with contextual needs, participation experiences and relational dynamics. We could, therefore, talk about specialist traditional disciplines that are developed in specific formats, as opposed to de-specialised emerging disciplines with non-specific and ubiquitous productions.

It becomes clear that a transformation of this type to the disciplines' structure would be linked to adequate and relevant teaching practices in the new context, which, from the point of view of this paper, would have 1) the idea of exercise I have already mentioned, 2) the learning by doing methodologies of the case studies we have discussed and 3) the teaching strategies outside the classroom given at the start of this paper.

Given this perspective, and taking into account the three aspects which comprise it, we feel that we could more adequately achieve the competences, skills and/or abilities required by creative studies under a general framework similar to the one described by Guy Julier (2010: 246) in *La cultura del diseño*: “(...) creatives must not limit themselves to creating products, graphics or attractive interiors, but they should also “find new forms of communication, materialising or dematerialising objects” (Maier-Aichen, 2004: 10). Design should be a transformation process that reconfigures routines and points of view.”

6. Involvement, empathy...and continuity of research

This article, as well as the paper in which it originated, is part of the current temporary context in line with existing advanced educational practices and explores the possibilities for an immediate future based on learning outside the classroom and learning by doing.

It should be said, however, that the completed research has led to its continuity beyond this text being scrutinised, extending it to being critically compared with other historical and cultural moments where the suitability of learning spaces in terms of educational objectives is questioned.

Without expanding on this point, I would like to refer to the acclaimed and often-quoted “Classroom without Walls” which Marshal McLuhan wrote in the 1960s and which reflects on generalised concerns in light of the cultural paradigm that represents generalised access to information via mass communication media. McLuhan argues that learning no longer takes place in the traditional classroom which he defines as the “antiquated home” and “feudal prison”, but outside the classroom through mass media and not in the transmission of knowledge which until now was led by books. This interpretation of learning outside the classroom opens up a very different debate to the one posed in this paper, but it would be interesting to identify certain historical moments where a similar debate has taken place and compare them to bring some sense of proportion to the issue and read it critically as a whole.

I would like to finish my current research with a quote from McLuhan, where he adds another dimension, which, all in all, in my opinion is key for getting students to exercise optimum responsibility for autonomous work outside the classroom: “It's misleading to suppose there's any basic difference between education and entertainment. This distinction merely relieves people of the responsibility of looking into the matter. It's like setting up a distinction between didactic and lyric poetry on the ground that one teaches, the other pleases. However, it's always been true that whatever pleases teaches more effectively” (McLuhan, 1960: 237).

Achieving student involvement and enthusiasm is a more relevant task for teachers to work on than it would first appear. We began this text by arguing that knowledge gained through experience is established in the subject's

identity, where it can later be converted into efficient mechanisms that are activated in different and unforeseen situations. In many cases, learning an isolated formalisation only works afterwards when students come across this very case study. However, acquired mechanisms are flexible and adaptive and remain interiorised by the conscience, thereby enabling the subject to find solutions for unknown and different cases. The idea of generative teaching proposed at the start of the text should also now be developed more empathetically.

References

- Julier, Guy (2010). *La cultura del diseño*. Barcelona: Gustavo Gili, p. 246
- Kavanagh, Simon (2013). The student revolution has begun, simply put, it's a boycott of academia! Kaospilot, Denmark
<http://www.kaospilot.dk>http://www.kaospilot.dk/student_rev_cp.aspx source consulted 01.11.2014
- Lyon, Philippa (2011). *Design Education. Learning, Teaching and Researching Through Design*. United Kingdom: Gower, p. 81
- McLuhan, M.H. & Carpenter, E. [et al] (1968). *El aula sin muros. Investigaciones sobre técnicas de comunicación*. Barcelona: Ediciones de Cultura Popular, p. 237; ed. original 1960
- Sanders, Elisabeth B. & Stappers, Pieter Jan (2013). *Convivial toolbox, generative research for the front end of design*. BIS Publishers, p. 17.
- Sloterdijk, Peter (2013). *Muerte aparente en el pensar. Sobre la filosofía y la ciencia como ejercicio*. Madrid: Siruela, p. 79.
- Strauss, Valerie (2013). Why the Learning Pyramid is Wrong? *Washington Post*, 6 March 2013. <http://www.washingtonpost.com/blogs/answer-sheet/wp/2013/03/06/why-the-learning-pyramid-is-wrong/>